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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,060	05/03/2001	Stefan Gruhl	6-1-1-12-39	5563

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Docket Administrator (Room 3J-219)  
Lucent Technologies Inc.  
101 Crawfords Corner Road  
P.O. Box 3030  
Holmdel, NJ 07733-3030

EXAMINER

MOORE JR, MICHAEL J

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 05/19/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/848,060

Applicant(s)

GRUHL ET AL.

Examiner

Michael J. Moore, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims **1 and 3-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yin et al. (U.S. 5,982,748) in view of Olofsson et al. (U.S. 6,647,265).

Regarding claim 1, Yin et al. teaches a method of determining whether to make a new call connection in column 1, lines 12-25. Yin et al. also teaches that each connection request specifies QoS parameters (QoS descriptor) such as bandwidth requirements, latency, or loss ratio in column 1, lines 29-33. Yin et al. also teaches that before accepting a new connection, a determination must be made whether the new connection will receive at minimum the QoS requirements requested in column 3, lines

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30-35. Yin et al. also teaches determining whether a new connection will receive at minimum the requested QoS while maintaining the guaranteed QoS to all existing connections in column 3, lines 30-35.

Yin et al. does not teach a QoS descriptor comprising a service degradation descriptor that specifies acceptable limits in degradation of QoS. However, Olofsson et al. teaches a method of generating a desired QoS for communication between a communication unit (mobile station) and a service provider (base station) in column 1 lines 12-65. In this method, a user expresses its service requirements to a service provider with two QoS vectors (descriptors) indicating desired service and acceptable (minimum level) limits of service as described in column 1, lines 46-65. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to combine the call admission control method of Yin et al. with the quality of service descriptors of the Olofsson et al. reference. A motivation for doing so would be in order to use CAC to provide an efficient utilization of network resources as stated in column 1, lines 20-26 of the Yin et al. reference.

Regarding claim 3, Yin et al. teaches QoS parameters such as bandwidth, latency (transmission delay), loss ratio, and jitter (delay variance) in column 1, lines 31-33 as well as column 3, line 66. Yin et al. does not teach that a service degradation descriptor specifies acceptable limits in increased jitter and increased bit error rate, and the order of importance of these increases. However, Olofsson et al. teaches QoS parameters that may include, but are not limited to, required bit rate, required bit error rate, and required transmission delay that are used in the two QoS vectors (required

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QoS and acceptable QoS) as described in column 1, lines 27-30 as well as column 1, lines 46-65. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to combine the QoS parameters of Yin et al. with the QoS descriptors of the Olofsson et al. reference. A motivation for doing so would be in order to use CAC to provide an efficient utilization of network resources as stated in column 1, lines 20-26 of the Yin et al. reference.

Regarding claim 4, Yin et al. further teaches a seamless service descriptor in Table 1. Table 1 shows varying service classes such as ABR, CBR, rt-VBR and nrt-VBR that arrive with each connection request. These service classes constitute seamless service descriptors that specify differing QoS and traffic parameters during handovers.

Regarding claim 5, Yin et al. further teaches where the seamless service descriptor specifies bandwidth requirements in Table 2. Table 2 shows an example of bandwidth requirements allocated to each service class (ABR, CBR, rt-VBR, nrt-VBR).

Regarding claim 6, Yin et al. teaches a connection admission controller 10 of Figure 1 that determines whether to make a new call connection in column 1, lines 12-25. Yin et al. also teaches that each connection request specifies QoS parameters (QoS descriptor) such as bandwidth requirements, latency, or loss ratio in column 1, lines 29-33. Yin et al. also teaches that before accepting a new connection, a determination must be made whether the new connection will receive at minimum the QoS requirements requested in column 3, lines 30-35. Yin et al. also teaches a monitor 16 (policer unit) and a queue scheduler 14 in Figure 1 that are coupled to connection

admission controller 10. Yin et al. also teaches in column 11, lines 51-54 that wireless network implementations may be used.

Yin et al. does not teach a QoS descriptor comprising a service degradation descriptor that specifies acceptable limits in degradation of QoS. However, Olofsson et al. teaches a method of generating a desired QoS for communication between a communication unit (mobile station) and a service provider (base station) in column 1 lines 12-65. In this method, a user expresses its service requirements to a service provider with two QoS vectors (descriptors) indicating desired service and acceptable (minimum level) limits of service as described in column 1, lines 46-65. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to combine the call admission control method of Yin et al. with the quality of service descriptors of the Olofsson et al. reference. A motivation for doing so would be in order to use CAC to provide an efficient utilization of network resources as stated in column 1, lines 20-26 of the Yin et al. reference.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yin et al. (U.S. 5,982,748) in view of Olofsson et al. (U.S. 6,647,265) and in further view of Kim (U.S. 6,215,768).

Yin et al. in view of Olofsson et al. teaches a network as in claim 6. Yin et al. in view of Olofsson et al. does not teach a connection admission controller comprises a Boolean decision maker and a connection impact evaluator arranged to assess impact of call acceptance. However, Kim teaches a connection admission controller 10 that contains a comparator 11 and an available bandwidth arithmetic unit 12 in Figure 1.

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These two components are used to assess whether the available bandwidth can allow for a call to be connected based upon the current network usage and the call's peak cell rate (PCR). At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to construct the connection admission controller of Yin et al. in view of Olofsson et al. out of the mentioned components of the connection admission controller of the Kim reference. A motivation for doing so would be in order to use CAC to provide an efficient utilization of network resources as stated in column 1, lines 20-26 of the Yin et al. reference.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aldred et al. (U.S. 6,278,693), Iwata (U.S. 5,933,425), Gernert et al. (U.S. 6,600,734), Nieh et al. (U.S. 6,331,970), Beshai et al. (U.S. 6,404,735), Shah et al. (U.S. 5,917,804), Shah et al. (U.S. 5,862,126), Dziong et al. (U.S. 6,697,369), Hughes et al. (U.S. 5,357,507), Chapman et al. (U.S. 6,028,842), Poretsky (U.S. 6,141,322), Arunachalam et al. (U.S. 6,631,122), Fijolek et al. (U.S. 6,636,485), Yamano (U.S. 6,636,516), Fichou et al. (U.S. 6,072,773), Park (U.S. 6,400,685), Abu-Amara et al. (U.S. 5,883,819), and Sabry et al. (U.S. 6,628,612) are all references that contain material pertinent to this application.

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7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (703) 305-8703. The examiner can normally be reached on Monday-Friday (8:30am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael J. Moore, Jr.  
Examiner  
Art Unit 2666

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